

Application No. 10/765,341  
Amendment dated September 28, 2005  
Reply to Office Action of June 29, 2005

### **REMARKS**

Applicant cancelled claim 14 without prejudice or disclaimer of its subject matter, amended claims 1, 3, and 11, and added new claims 21 and 22 to further define Applicant's claimed invention. New claim 21 is supported by the specification at least on page 13, lines 21-22. New claim 22 is supported by the specification at least on page 14, lines 4-7. New claims 21 and 22 read on Group I as defined by the Restriction Requirement dated January 7, 2005.

In the Office Action, the Examiner rejected claim 3 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner contends that "it is unclear what the claimed 'lock' is in light of the specification, particularly since the carrier is slidable rather than fixed to the shaft." (Office Action, page 2, paragraph 2). Claim 3, as now amended, recites "a lock for slidably locking said carrier member to said shaft." Applicant discloses on page 15, lines 13-24 and Fig. 4 a locking assembly that slidably locks the carrier member to the rongeur. Applicant respectfully submits that a person of ordinary skill in the art would understand the "lock" being claimed at least in view of Applicant's disclosure. Applicant submits that the rejection of claim 3 under 35 U.S.C. § 112, second paragraph, has been overcome.

The Examiner rejected claims 4, 5, 11, and 14 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. For claims 4 and 5, Applicant amended the specification to provide antecedent basis for these claims. The amendment to the specification is supported at least by claims 23-25 as originally filed. Applicant respectfully brings to the Examiner attention that according to MPEP § 2163(I)(B), "[t]he claims as filed in the original specification are part of the disclosure...." (MPEP § 2163(I)(B) (May 2004); see also, MPEP § 608.01(I) "Original Claims" (May 2004)). For the Examiner's convenience, a copy of the claims as originally filed on August 18, 1993 is attached hereto as Exhibit A. The subject matter

Application No. 10/765,341  
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of claim 5 is further supported at least by the specification on page 16, lines 11-13, which recites that the distal end of the straw may be open.

For claim 11, Applicant amended this claim to recite that "said tubular member is configured to hold the cut pieces of bone or cartilage upon uncoupling from at least one of said shaft and said mechanism."

For claim 14, Applicant cancelled this claim without prejudice or disclaimer of its subject matter, thus rendering the Examiner's rejection in view of this claim moot.

Applicant submits that the rejections of claims 4, 5, 11, and 14 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement has been overcome.

The Examiner rejected claims 1-3 and 5-13 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 4,777,948 to Wright ("Wright"). Independent claim 1, as now amended, recites that the shaft is "in slidable relationship with said carrier member without passing through said tubular member when said tubular member is inserted at least in part into said open interior of said carrier member."

Wright teaches a tubular cutting element 28 that is radially clamped to the barrel of the surgical tool in a collet-like chucking action via collet-like nut 36. Shaft 38 slides through tubular cutting element 28. (Wright, col. 3, lines 11-24 and Fig. 2). Wright does not teach or suggest a rongeur as recited in independent claim 1 of Applicant's claimed invention. Accordingly, Applicant respectfully submits that the rejection of claims 1-3 and 5-13 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Wright has been overcome.

The Examiner rejected claims 4 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Wright. Applicant submits that the rejection over claim 4 is rendered moot at least because it depends from an allowable independent claim, or claims dependent therefrom.

Applicant submits that independent claim 1 is patentable and that dependent claims 2-13, 21, and 22 dependent from independent claim 1, or claims dependent

Application No. 10/765,341  
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therefrom, are patentable at least due to their dependency from an allowable independent claim.

In view of the foregoing remarks, it is respectfully submitted that the claims, as amended, are patentable. Therefore, it is requested that the Examiner reconsider the outstanding rejections in view of the preceding comments. Issuance of a timely Notice of Allowance of the claims is earnestly solicited.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-1066.

Respectfully submitted,

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Dated: September 28, 2005

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**EXHIBIT A**

What is claimed is:

1. A rongeur for cutting bone or cartilage, comprising:

a body having a forward shaft terminating in a foot plate;

a slide drive member slidable in relationship to said shaft;

a slidable cutting/storage member removably attachable to said shaft, said cutting/storage member having a cutting means at its end proximate said foot plate and a storage means proximate said cutting edge for collecting and storing cut pieces of bone or cartilage;

means for engaging said slide drive member to said cutting/storage member;

means for engaging said cutting/storage member to said shaft; and

means for activating said slide drive member.

2. The rongeur of claim 1 in which said foot plate is substantially flat.

3. The rongeur of claim 2 in which said foot plate is ultra thin.

4. The rongeur of claim 1 in which said storage means is a hollow storage chamber.

5. The rongeur of claim 4 in which said hollow chamber has an open distal end and a closed proximal end.

6. The rongeur of claim 5 in which said distal end is closed only during use of the rongeur.

7. The rongeur of claim 4 in which said hollow chamber increases in cross sectional area from its distal end to its proximal end.

8. The rongeur of claim 1 in which said cutting/storage member has at least a portion thereof that is replaceable.

9. The rongeur of claim 1 in which said means for activating said slide drive member includes a handle means associated with said rongeur, said slide drive member being responsive to movement of said handle means.

10. The rongeur of claim 1 in which said means for activating said sliding member includes an electrically powered reciprocating device, said slide drive member being responsive to said electrically powered reciprocating device.

11. The rongeur of claim 10 in which said reciprocating device includes a reciprocally moving element and solenoid activated means activated by a switch, said reciprocating moving element responsive to activation of said solenoid.

12. The rongeur of claim 11 in which said electrical reciprocating device is battery powered.

13. The rongeur of claim 1 including means for locking said cutting/storage member to said shaft.

14. The rongeur of claim 13 in which said means for locking further comprises:

- a stop pin depending from said slide drive member;
- a button assembly comprising an external button portion, a narrow diameter portion, a large diameter member having a rounded bottom portion and a flat top portion, a spring means, said narrow diameter portion having a depression for receiving said stop pin;

- said shaft having a recess with a rounded bottom for receiving said large diameter member, said shaft having an opening on one side adjacent and coaxial to said recess, said

opening having a diameter larger than said narrow diameter portion and smaller than said external button portion;

said narrow diameter portion and said large diameter member being disposed within said recess, said large diameter member being biased by said spring extending said external button portion external to said shaft, said large diameter member blocking said stop pin and locking the cutting/storage member onto said shaft

whereby depressing the external button portion results in the compression of said spring means and moves said large diameter member further within said recess to align said depression with said stop pin for unlocking said cutting/storage member from said shaft.

15. The rongeur of claim 1 including a groove into said shaft at the intersection of said foot plate aligned generally transverse to the longitudinal axis of said shaft for separating the intersection of stress fields in said foot plate and cutting/storage member when said rongeur is placed under stress during cutting.

16. The rongeur of claim 15 further including an extension member extending from said cutting/storage member, said extension member capable of fitting within said groove and preventing upward excursion of said cutting/storage element along said foot plate.

17. A rongeur for cutting bone or cartilage, comprising:

a body having a forward shaft terminating in a foot plate;

a slide drive member slidable in relationship to said shaft;

a cutting/storage member having a cutting means at one end proximate said foot plate and a storage means proximate said cutting means for collecting and storing cut pieces of bone or cartilage;

a slidable housing member removably attachable to said

shaft, said housing member having means for holding said cutting/storage member;

means for engaging said slide drive member to said housing member;

means for engaging said housing member to said shaft; and

means for activating said slide drive member.

18. The rongeur of claim 17 in which said foot plate is substantially flat.

19. The rongeur of claim 21 in which said foot plate is ultra thin.

20. The rongeur of claim 17 in which said cutting/storage member is a hollow straw having a cutting edge at its distal end for cutting pieces of bone or cartilage, said pieces of bone or cartilage being stored within said hollow straw after being cut.

21. The rongeur of claim 20 in which said hollow straw is removably insertable within said cutting/storage member.

22. The rongeur of claim 20 in which said hollow straw is replaceable and disposable.

23. The rongeur of claim 20 in which said hollow straw has an open distal end and a closed proximal end.

24. The rongeur of claim 23 in which said distal end is closed only during use of the rongeur.

25. The rongeur of claim 4 in which said hollow straw increases in cross sectional area from its distal end to its proximal end.

26. The rongeur of claim 17 in which said cutting/storage member has at least a portion thereof that is replaceable.

27. The rongeur of claim 17 in which said means for activating said slide drive member includes a handle means associated with said rongeur, said slide drive member being responsive to movement of said handle means.

28. The rongeur of claim 17 in which said means for activating said sliding member includes an electrically powered reciprocating device, said slide drive member being responsive to said electrically powered reciprocating device.

29. The rongeur of claim 28 in which said reciprocating device includes a reciprocally moving element and solenoid activated means activated by a switch, said reciprocating moving element responsive to activation of said solenoid.

30. The rongeur of claim 29 in which said electrical reciprocating device is battery powered.

31. The rongeur of claim 17 including means for locking said cutting/storage member to said shaft.

32. The rongeur of claim 31 in which said means for locking further comprises:

a stop pin depending from said slide drive member;

a button assembly comprising an external button portion, a narrow diameter portion, a large diameter member having a rounded bottom portion and a flat top portion, a spring means, said narrow diameter portion having a depression for receiving said stop pin;

said shaft having a recess with a rounded bottom for receiving said large diameter member, said shaft having an opening on one side adjacent and coaxial to said recess, said opening having a diameter larger than said narrow diameter portion and smaller than said external button portion;

said narrow diameter portion and said large diameter



member being disposed within said recess, said large diameter member being biased by said spring extending said external button portion external to said shaft, said large diameter member blocking said stop pin and locking the cutting/storage member onto said shaft

whereby depressing the external button portion results in the compression of said spring means and moves said large diameter member further within said recess to align said depression with said stop pin for unlocking said cutting/storage member from said shaft.

33. The rongeur of claim 17 including a groove into said shaft at the intersection of said foot plate aligned generally transverse to the longitudinal axis of said shaft for separating the intersection of stress fields in said foot plate and cutting/storage member when said rongeur is placed under stress during cutting.

34. The rongeur of claim 33 further including an extension member extending from said cutting/storage member, said extension member capable of fitting within said groove and preventing upward excursion of said cutting/storage element along said foot plate.

35. A removable and disposable cutting/storage member for use in a rongeur, said cutting/storage member comprising a hollow member, said hollow member having a cutting edge at one end thereof, said cutting/storage member having a hollow portion proximate said cutting edge for receiving and holding cut pieces of bone or cartilage cut by said rongeur.

36. The cutting member of claim 35 in which said cutting member comprises a hollow tubular member having a generally rectangular cross section, and a projection extending from the bottom surface of said tubular member for removably attaching said cutting member to the shaft of said rongeur.